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Discussion Paper

Document de travail

A CANADIAN TRANSPORTATION ACCIDENT

INVESTIGATION COMMISSION

UNE COMMISSION CANADIENNE D'ENQUETE

SUR LES ACCIDENTS DANS LES TRANSPORTS

^{LC Dept.}
Canada Minister of Transport

Ministre des Transports

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THE CANADIAN TRANSPORTATION ACCIDENT

INVESTIGATION COMMISSION

OBJECT

1. In 1975, Cabinet approved in principle the establishment of an independent organization to investigate and promote safety in all modes of transportation, but asked for a further report on the scope of the proposed organization, the cost of establishing and operating it and its proposed reporting procedures.
2. This Paper is in response to that request.

BACKGROUND

History of the Project

3. Transport Canada has received numerous complaints from various bodies to the effect that the investigation of transportation accidents in modes under federal jurisdiction is subject to conflicts of interest, perhaps real and certainly apparent, because the people carrying out the investigations report to government officials who are also responsible for supervision and regulation of the particular mode of transportation in which the investigated accident occurred. It is true that such links in reporting relationships do exist in the air, surface and marine modes.
4. [In response to this public criticism, the Minister of Transport ordered that the possibility of establishing an Independent Accident Investigation Board be evaluated. Officials of the Air, Marine and Surface Administrations and of the Canadian Transport Commission studied the situation in Canada and abroad. They came to the conclusion and recommended that such an independent organization should be created through appropriate legislation, and Cabinet approved the recommendation in principle.
5. In the meantime, the question of impartial investigation of transportation accidents had received further public interest. In the House of Commons, several private members' Bills dealing with the subject matter were introduced by Mr. J.M. Forrestall, M.P. for Dartmouth-Halifax.

Present Arrangements for Accident Investigation

6. At the present time, accident investigations in transportation modes under federal jurisdiction are carried out by regulatory agencies¹ which are part of integrated systems. Typically, separate units in the several modes of transport are responsible for developing safety standards, for monitoring operations to ensure that these standards are met, and for investigating accidents and near-accidents. These units work closely together and form part of the same organization, thereby ensuring that a rapid exchange of information takes place and that the right mixture of expertise is assigned to solve each particular problem. There are accident investigation units in the Air, Marine and Surface Administrations and at the Canadian Transport Commission.
7. Although these systems work well, they are exposed to "conflict of interest" criticism.
8. Table 1 shows the number of accidents reported and investigated in the years 1970 to 1975, the number of fatal accidents by transport mode, and the number of full-time accident investigators employed in 1976.
9. In Table 1, the definition of an "accident" varies from mode to mode, but in all cases an "investigation" involves an on-site inspection by investigators from the accident investigation unit of the federal regulatory agency concerned. Quite naturally, accidents resulting in fatalities have been the major cause for public concern about the impartiality of the investigation. This aspect will, therefore, be of particular importance in deciding the scope of responsibility and the nature of the new investigation organization.

¹ The term "regulatory agencies" will henceforth be used to refer to those components of the Air, Marine and Surface Administrations, and the Canadian Transport Commission, that perform safety regulation functions, including accident investigations.

TABLE 1

YEAR	<u>Marine</u>		<u>Air</u>		<u>Surface¹</u> (motor vehicles)		<u>Rail</u>	
	<u>Accidents*</u>		<u>Accidents*</u>		<u>Accidents*</u>		<u>Accidents*</u>	
	<u>Reported</u>	<u>Invest.</u>	<u>Reported</u>	<u>Invest.</u>	<u>Reported</u>	<u>Invest.</u>	<u>Reported</u>	<u>Invest.</u>
1970	451 (n.a.)	53	565 (n.a.)	565	498,839	17(6)	4,622 (137)	541
1971	422 (11)	54	565 (78)	565	491,781	73(15)	4,721 (145)	569
1972	463 (18)	86	652 (92)	652	527,911	106(12)	4,818 (163)	1,190
1973	442 (22)	81	729 (86)	729	553,146	107(26)	4,684 (140)	1,191
1974	471 (27)	98	710 (74)	710	623,765	118(35)	5,254 (144)	1,358
1975	397 (51)	121	713 (92)	713	645,464	119(47)	4,574 (133)	597

* The number of accidents involving loss of life is shown in brackets. In the air transport column, roughly half of the fatal accidents involved commercial aircraft.

No. of Full-time
Accident Investigators

H.Q.	6	15	4	5
Field	0	37	0	6

NOTE:

Marine: In view of the shortage of man-power, personnel other than Accident Investigators are frequently used in the field operations. It is expected that 5 Accident Investigators will be added soon to field operations.

Surface: There are 10 teams located at universities across Canada with a total of 18 accident investigators operating under contract and direction by Ottawa headquarters.

Rail: Although there are only 11 persons formally designated as Accident Investigators, other employees of the RTC, from H.Q. as well as field operations, are deployed from time to time as Accident Investigators, depending on their experience in certain areas.

¹ Highways being under the jurisdiction of the provinces, accidents are not formally reported to Ottawa. Certain accidents are selected to be investigated, on the basis of criteria established by the Canadian Surface Transportation Administration.

OPTIONS

10. In order to solve the conflict of interest problem that currently exists at least in appearance, five options come to mind. There are two extremes which may be postulated: (1) a new, additional organization might be created, or (2) a new organization might be created to take over the role and staff of existing organizations.

11. Neither of these extreme solutions can be recommended. The first one would undoubtedly result in duplication and confusion of responsibility, thereby creating a danger that, in some cases, nobody would take effective action. The second extreme would destroy existing, integrated systems that are working well and would cause a major organizational upheaval. It would inevitably also lead to a diminution in the sense of personal responsibility for safety now felt by safety regulators. It is vital that visible independence should not be purchased at the expense of demonstrated professional competence.
12. Several possible solutions fall between these two extremes: (3) An independent Commission could be created that would not carry out investigation but would instead review all reports prepared by the regulatory agencies; but this would not really silence all criticism about potential conflicts of interest. Furthermore, it would operate *post facto*, and would be denied access to primary sources of information available to the original investigator.
13. (4) The Commission could be required to select the accidents that it will investigate on the basis of criteria established by the Governor-in-Council or on the basis of a statistical sample. Under this approach, however, it is difficult to see how confusion about who is to initiate action could be avoided, and delays in getting accident investigators to the scene would be a serious problem.
- pg 9
sec : 14. (5) A clear, simple rule could be established which delineates the boundary between the responsibilities of accident investigators in the Commission and in the regulatory agencies. ^{11A} * convenient criterion is loss of life, and fears of conflict of interest arise mainly in connection with fatal accidents. The law could stipulate that the Commission would investigate all accidents in which loss of life has occurred. ||
- proposed
mandate

The proposed mandate of
the Commission is to investigate
fatal accidents

15. Owing to ignorance or error, first reports of an accident may, in practice, not refer to a fatality and injuries may subsequently lead to death but as pointed out below, this should not cause serious problems. The purpose of the rule is not to ensure that a certain number of accidents is investigated by an independent Commission, but to draw a clear, simple boundary between two areas of responsibility. It may be argued that by the selection of death as the standard criterion for Commission involvement in an accident, the question of apparent conflict of interest in non-fatal accidents is bypassed. There is some merit to this argument, but in answer it may be maintained that (i) the temptation, if it exists, to collusion among investigators and regulators would be strongest in fatal accidents, and (ii) a reasonable balance must be struck between what is desirable in the absolute, and what is reasonably feasible, given scarcities of available skilled and dedicated people, funds and equipment.
16. The law should stipulate that each regulatory agency, as soon as it has knowledge of an accident falling within the Commission's purview in which there is reasonable apprehension of loss of life, must inform the Commission and turn over to it the federal responsibility for investigating that accident. In any cases where doubts arise, it would be the responsibility of the Commission to decide whether the regulatory agency concerned or the Commission should carry out the investigation.
17. It would also be advisable for the Commission to be responsible for accident investigations when
- (a) an accident involves aircraft and ships operated by or on behalf of government departments, other than the Department of National Defence (DND);
 - (b) directed to do so by the Minister of Transport;
 - (c) authorized to do so by the Governor-in-Council upon the request of a provincial government or another federal agency, subject to the proviso that the Commission may assess charges not to exceed its costs against the agency that requests the investigation.

The Structure of the Commission

18. The Commission would consist of a single Commissioner, along the lines of the Auditor General, reporting to Parliament through the Minister of Transport.
19. Because of the difficulty of precisely predicting workloads, he should have authority to delegate to Commission investigators his powers which would be those of a Commissioner appointed under the Inquiries Act, Part 1.
20. The Commissioner would be appointed by the Governor-in-Council to hold office during good behaviour for a term not to exceed seven years, but he should be eligible for reappointment.

Scope of the Commission

21. Cabinet requested a discussion of jurisdictional disputes which might arise between the proposed organization and existing investigating bodies within government, and also the possibility of covering accident investigations in areas which are not chiefly related to transport.

22. If the scope of the Commission is restricted to transportation accidents, there may be jurisdictional disputes in seven areas:

- (1) Disputes between the Commission and the regulatory agencies of the Marine, Air and Surface Administrations of Transport Canada and the CTC. This would vary according to the organizational structure adopted, and this topic is discussed on pages 7, 9 and 11 of this paper.
- (2) Disputes between the Commission and DND's investigative body. In view of the large differences legally and administratively between military and civilian accidents, it is proposed that the Commission's activities should be confined to accidents in which a civilian vehicle is involved. (There may be a duplication if both civilian and military vehicles are involved but the Commission and DND will need to work out a joint approach, as the regulatory agencies now do).

(3) The proposed Transportation of Dangerous Goods Act; if investigations by the federal government of fatal accidents occurring during the transportation of dangerous goods should be carried out by the new Commission, the Act under which the Commission would be established should amend the proposed Transportation of Dangerous Goods Act accordingly. (This Bill is now under review by the Dangerous Goods Secretariat and the Department of Justice.)

(4) Gas and oil pipelines. The National Energy Board (NEB) is responsible for both regulating safety and investigating accidents. The advantages of introducing demonstrable impartiality therefore apply in this case as much as in the other transport modes. Thus, the new Commission should be assigned responsibility to investigate, for the purpose of establishing the cause and contributing factors, fatal accidents resulting from the operation of oil and gas pipelines. The NEB's statutory duty to order remedial action, if necessary, shall not be affected by an investigation carried out by the Commission.

(5) Coroners are under provincial jurisdiction. They are responsible for determining the cause of a death, not the cause of an accident. Although coroners' juries may at times venture beyond their terms of reference, legally there should be no jurisdictional disputes between coroners and the proposed Commission. The existence of a special organization investigating fatal transportation accidents should reduce the possibilities of adverse publicity arising from coroners' inquests.

(6) The RCMP and other police forces. The main aim of the police in the present context is to find out who may have committed a crime. The proposed Commission would be involved in determining what has caused an accident, not in establishing guilt. Although there should therefore be no jurisdictional problem, establishing the cause of an accident may require special measures to protect access to privileged information which would prohibit Commission investigators from providing certain information to assist the RCMP or other police forces. This is discussed on page 27, paragraph 38 of this paper.

The vital role of the police in accident investigations should, however, not be overlooked. In most cases, the police will secure the site of an accident by cordoning it off, thus, *inter alia*, preventing unauthorized persons from interfering with the wreckage. Close co-operation between accident investigators and police forces is essential and should formally be laid out in the Regulations under the Act creating the Commission. A "Disaster Plan" prepared for the police force of the Province of British Columbia and approved by the RCMP may serve as a useful guide in this respect.

- (7) Highway accidents. The investigation of highway accidents is the responsibility of provincial governments; but investigations of accidents resulting from motor vehicle defects are also carried out by project teams on behalf of the Canadian Surface Transportation Administration under the authority of the Motor Vehicle Safety Act. It is proposed that there should be no change in this particular program because of the difficulty of establishing, soon after a fatal accident, that a motor vehicle defect is involved.

B L The proposed Commission would confine its activities to a review of project teams' reports. It may be that, in time, one or more of the provinces might wish to make use of a federal organization dedicated to finding out the cause of a fatal highway accident, not establishing guilt. It would be advisable to allow for this possibility in the legislation establishing the Commission, subject to Governor-in-Council approval, to the availability of resources to handle the additional workload, and to the proviso that the Commission may assess charges against the provincial government that requests the investigation.

23. As to the investigation of accidents in areas other than transport, three areas of potential interest to the federal Commission have been identified:

- (1) Explosives (Energy, Mines and Resources);
- (2) Atomic energy (Atomic Energy Control Board);
- (3) Drilling rigs (Energy, Mines and Resources and Indian and Northern Affairs).

24. Current accident investigation practices in these three areas are perhaps as open to fear of conflict of interest as transportation accident investigations. In the first two cases, however, the accidents are often industrial rather than transportation accidents; including them in the Commission's responsibilities would risk duplication with the functions of provincial and other federal agencies. Accidents involving explosives and radioactive materials that occur during transport or handling for transport, would be investigated by Transport Canada under the Transportation of Dangerous Goods Act, or by the Commission if a loss of life was involved. Provision should be made, however, that the Commission shall not investigate an accident involving material dangerous to health until, in the opinion of the Commission, the health hazard has been removed.
25. In the case of drilling rigs, responsibility for the investigation of accidents is not clearly established. The Marine Administration claims that drilling rigs are "ships" or "vessels" as defined in the Canada Shipping Act and are therefore under its jurisdiction, while the Department of Energy, Mines and Resources (EM&R) and the Department of Indian and Northern Affairs (DINA) claim that the operation and all safety matters of drilling rigs are their responsibility under the Oil and Gas Production and Conservation Act. This problem should be solved by adding to the definition of "vessel" of the Canada Shipping Act a provision to the effect that a vessel includes drilling rigs which are afloat. Thus, there would be no doubt that an investigation to establish the cause of a non-fatal accident would be carried out by the Marine Administration of Transport Canada, and an investigation to establish the cause of a fatal accident would be the responsibility of the new Commission.
26. This, however, would apply only to Canadian-registered ships anywhere in the world, and to non-Canadian registered ships within the twelve-mile territorial limit of Canada. Foreign-registered drilling rigs operating outside Canadian territorial waters but within the area of Canada's continental shelf are subject to the Oil and Gas Production and Conservation Act as far as licensing and operating matters are concerned, due to the provisions of the Geneva Convention of 1958 which established the right of states over natural resources in their adjoining continental shelves and which is incorporated in the Oil and Gas Production and Conservation Act, section 3.

However, the right to investigate accidents on such drilling rigs by the new Commission or the Marine Administration cannot be derived from a Canadian Statute, and any legislative attempt to establish such jurisdiction would be *ultra vires* the powers of Parliament and, for that matter, of any legislative body of any country. To extend the authority of the Marine Administration and of the new Commission with regard to accident investigation on foreign-registered drilling rigs operating on Canada's continental shelf but outside the twelve-mile zone, the licence which such a drilling rig needs, issued by EM&R or DINA respectively, should contain a clause stipulating that the licensee accepts the fact that the investigation of accidents occurring on the rig while it is within the area of the Canadian continental shelf will be carried out by either the Marine Administration or the new Commission. The Oil and Gas Production and Conservation Act should be amended to provide for the inclusion of such a clause in the licences. The investigation of accidents on drilling rigs by the appropriate branches of EM&R and DINA for their own purposes would not be prejudiced by this provision.

27. At present, the Marine Administration is empowered to investigate accidents involving vessels on waters anywhere in Canada. In practice, however, investigations by federal officers are generally restricted to accidents involving registered vessels, not small craft that are licensed rather than registered, whereas provincial police and coroners investigate small boat or pleasure craft accidents. This state of affairs should be recognized in the legislation creating the Commission.
28. To sum up, the Commission should have responsibility for any federal investigations of civilian accidents involving a loss of life in transportation modes subject to federal safety regulation, excluding vessels not used for commercial purposes. The area of responsibility would thus include:

- (a) air transportation;
- (b) marine transportation (including accidents on drilling rigs);
- (c) rail transportation (including rail/car collisions);
- (d) oil and gas pipelines;
- (e) commodity pipelines (there are none of these as yet in Canada).

29. Creating a new accident investigation body, no matter how clearly its ~~soppe~~is defined, would call for very high levels of co-ordination with other agencies responsible for investigating accidents from other perspectives.

Modus Operandi of the Commission

30. In a Commission investigation, an investigator would be immediately assigned to the case and sent to the scene of the accident. Independent from activities to be carried out by the police and the coroner, he would be by law in charge of the investigation conducted for the purpose of establishing the cause and contributing factors of the accident. For example, the removal of wreckage, where applicable, and other pieces of evidence, could be carried out only with his approval subject to the provision that the preservation of life, health and property would have priority over any other consideration. It would be the duty of the investigator in charge not to prevent longer than is necessary for the purpose of his investigation the speedy clearance of an accident site which interrupts the flow of essential traffic. Rules in respect of these details would be spelled out in the Regulations promulgated under the Act establishing the Commission. Investigators from the regulatory agencies could also participate in such an investigation as observers if the regulatory agency so desired. This would have the advantage of ensuring the rapid transmission of any lessons learned during a Commission investigation to the appropriate regulatory office.

31. By the same token, the Commission's officers would have the right to attend and observe and report to the Commission upon all stages of accident investigations carried out by a regulatory agency. Such action would be desirable from the point of view of further reducing the possibility of charges of conflict of interest.

32. So that the Commission will be in a position to effectively perform this function, there should be a requirement that the federal regulatory agency immediately inform the Commission of a planned investigation.

*Report to remove
conflict of interest
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33. The Commission should be empowered to review and comment upon any final reports on accidents and near-accidents prepared by the regulatory agencies.
34. As soon as the Commission's investigation is completed, the Commission should notify in writing the appropriate regulatory agency of its findings with regard to the cause of and factors contributing to the accident investigated by it. The regulatory agency thus notified should advise the Commission in writing within ninety days of receipt of the Commission's notice of any action it has taken in response to the Commission's findings. The Commission should submit an annual report to the Minister of Transport who would have to table the report in Parliament within four weeks thereafter or on the first day that Parliament sits after four weeks have elapsed. The Commission's report would describe its activities and comment upon the findings it has communicated to the regulatory agencies.
35. The Commission would be authorized to request that a regulatory agency second one or more of its experts for a specific investigation. If the regulatory agency agrees, the Commission should reimburse it and also other government departments which may provide experts for services provided. Should a government specialist not be available at the time he is needed or should, in the opinion of the Commissioner, employment of a government specialist create a possible conflict of interest situation, the Commission would be empowered to employ non-government experts.
36. The Commission would have its own administrative and investigative staff who should be public servants. It would be subject to Treasury Board rules and regulations for its administration.
37. Arrangements for international co-operation during accident investigations have been worked out over the years by the Canadian regulatory agencies. The Commission similarly would be expected to participate in international activities dealing with transportation accident investigation matters.

42. The legislation will have to make provision for transitional arrangements to match the Commission's responsibilities with its resources during the early part of its existence. For example, the responsibility to review accident reports of the regulatory agencies might exist from the outset, but responsibility to conduct investigations of fatal accidents might be built up over time, mode by mode.

FINANCIAL CONSIDERATIONS

43. The estimated annual cost of operating the proposed Commission, including staff, space rental, travel, incidentals and payments to outside experts is \$1.5 million.

FEDERAL-PROVINCIAL CONSIDERATIONS

44. Although the proposed Commission would be a federal agency, concerned with fatal accidents occurring in transportation fields regulated by the federal government, the Commission should be authorized to investigate other fatal accidents occurring in areas under provincial jurisdiction, if requested to do so by provincial governments.
45. It is thought that provincial governments will be only moderately interested in the proposed Act and no adverse reactions are anticipated. Consultations on the proposed Commission could be held with provincial governments at an early opportunity under the aegis of the various federal/provincial transportation committees.

INTERDEPARTMENTAL CONSULTATION

46. In preparing this paper, comments were solicited from the Departments of National Defence, Labour, Energy, Mines and Resources and Indian and Northern Affairs, and from Treasury Board, the Privy Council Office, the National Energy Board, the RCMP, the CTC and the Atomic Energy Control Board.

RECAPITULATION

47. A need to establish an independent organization for the investigation of transportation accidents was identified by Cabinet in 1975. The applicable criteria for such an organization are that its independence must be visible, and that it must not interfere with the safety functions of existing regulatory agencies.

48. Five options are discussed in this paper, viz:

- (1) Creation of a new organization, in addition to the presently existing accident investigation units within the regulatory agencies.
- (2) Creation of a new organization which would absorb the presently existing accident investigation units.
- (3) Creation of a new organization which would review all accident investigation reports of the regulatory agencies but would not itself conduct accident investigations.
- (4) Creation of a new organization which would select accidents to be investigated by it on the basis of criteria established by the Governor-in-Council or on the basis of a statistical sample.
- (5) Creation of a new organization which would be responsible for the investigation of all fatal accidents in all modes of transportation, leaving the investigation of non-fatal accidents and incidents in the hands of presently existing regulatory agencies.

49. The extent of potential jurisdictional overlaps with existing investigating bodies would depend on the organizational structure adopted and the scope of the new organization's responsibilities. It would be necessary to amend some Acts which would be affected by the establishment of the proposed organization.

